

REMARKS

The present application was filed on December 21, 2001 with claims 1-17. Claims 1-17 have been canceled. Claims 18-32, added by amendment, are pending. Claims 18, 25, 26 and 29 are the pending independent claims.

Claims 18-32 are rejected under 35 U.S.C. § 103(a) as unpatentable over International Patent Publication No. WO 98/26611 (hereinafter “Ganmukhi”) in view of U.S. Patent No. 6,914,878 (hereinafter “Lindblom”).

Applicants respectfully request reconsideration of the present application in view of the amendments above and remarks below.

Regarding the objection to claim 20, Applicants have amended claim 20 in the manner suggested by the Examiner.

A proper *prima facie* case of obviousness requires that the cited references when combined must “teach or suggest all the claim limitations,” and that there be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references or to modify the reference teachings. See MPEP § 706.02(j).

Applicants submit that the Examiner has failed to establish a proper *prima facie* case of obviousness for the present §103(a) rejection, in that even if assumed to be combinable, Ganmukhi and Lindblom collectively fail to teach or suggest all the claim limitations, and in that no cogent motivation has been identified for combining the references or for modifying the reference teachings to reach the claimed invention. Further, even if it is assumed that a proper *prima facie* case has been established, there are particular teachings in one or more of the references which controvert the obviousness argument put forth by the Examiner.

Independent claim 18 recites, among other limitations, controlling a second switch fabric to assume an active mode from a standby mode responsive to a drain timer having timed out or receipt of a switch fabric empty signal from a first switch fabric, and starting a restart timer subsequent to the drain timer having timed out or the switch fabric empty signal having been received from the first switch fabric.

In formulating the rejection, the Examiner concedes that Ganmukhi fails to disclose the limitations of claim 18 directed toward the use of drain and restart timers. Rather, the Examiner contends that the plane change timer (PCT) and start sync cell wait timer (SWT) of Lindblom

meet the drain timer and restart timer as recited in claim 18. The differences between the recited drain and restart timers and the PCT and SWT timers of Lindblom are apparent from the timing diagram of FIG. 10 in Lindblom. It appears from the rejections that the Examiner is arguing that the SWT meets the recited drain timer and that the PCT meets the recited restart timer. However, FIG. 10 clearly indicates that the SWT is not started until expiration of the PCT. See Lindblom at column 12, lines 58-60, and event 10-4 of FIG. 10. Thus, if the SWT is alleged to meet the recited drain timer, the PCT does not meet the recited restart timer, because claim 18 recites the starting of a restart timer subsequent to the drain timer having timed out or the switch fabric empty signal having been received from the first switch fabric. In Lindblom, it is expiration of the PCT that controls the start of the SWT.

Moreover, it should be noted that the PCT of Lindblom is not a drain timer of the type recited in the claim. To the contrary, the PCT is described in Lindblom as running long enough to ensure that the slowest switch port interface units 26 have had time “to receive [a] plane change cell and start their plane change process.” See Lindblom at column 12, lines 39-48. It is apparent from the timing diagram of FIG. 10 that egress traffic from switch plane A continues to flow after the PCT has expired at event 10-4. Thus, switch plane A apparently remains in an active mode, continuing to transmit egress data traffic, even after expiration of the PCT. Thus, the PCT of Lindblom is not a drain timer of the type recited in claim 18, and cannot reasonably be construed as a restart timer as recited in claim 18. Hence, the combined teachings of Ganmukhi and Lindblom fail to meet the limitations of claim 18.

Even if it were possible to combine the teachings of Ganmukhi and Lindblom in order to reach the limitations of claim 18, it would not have been obvious to do. In formulating the rejection, the Examiner argues that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the timers to determine when the functions must be started or ended as disclosed by Lindblom into the teaching of Ganmukhi. The motivation would have been to reduce switching time.”

Applicants respectfully submit that this is a conclusory statement of the sort rejected by both the Federal Circuit and the U.S. Supreme Court. See KSR v. Teleflex, 127 S.Ct. 1727, 1741, 82 U.S.P.Q.2d 1385, 1396 (U.S., Apr. 30, 2007), quoting In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory

statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”).

More specifically, the statement above is using the benefit obtained from a combination as a motivation for that combination; this is impermissible hindsight. In order to avoid the improper use of a hindsight-based obviousness analysis, particular findings must be made as to why one skilled in the relevant art, having no knowledge of the claimed invention, would have combined the teachings of Ganmukhi and Lindblom in the claimed manner (See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)). The Examiner’s conclusory statements do not adequately address the issue of motivation to combine references. “It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to ‘[use] that which the inventor taught against its teacher.’” In re Sang-Su Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002) (quoting W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

Furthermore, Ganmukhi contains specific teachings away from the proposed combination with Lindblom. Rather than teaching the use of any technique wherein a predetermined delay exists between the assertion of a signal and a switchover, Ganmukhi instead teaches an entirely different technique wherein a switchover is predicated upon the receipt of at least a predetermined number of successive idle cells following the assertion of a signal. See Ganmukhi at page 6, lines 4 to page 7, line 22. Specifically, Ganmukhi suggests a technique wherein “following the assertion of the SYNC_TIME_L signal, a counter within each of the output modules is incremented each time an idle cell is received. When ‘n’ back to back idle cells are received, it is assumed that the switch fabric has no further cells to forward. . . . In a preferred embodiment of the invention, ‘n’ . . . corresponds to a time larger than the worst case propagation delay for a cell through the switch fabric.” (Ganmukhi, page 6, lines 23-29)

Ganmukhi contains further teaching away from use of a drain timer of the type recited in claim 18. See Ganmukhi at, for example, page 9, lines 16-22:

[T]he worst case wait technique for assuring data unit drainage is disadvantageous for at least two reasons. First, the worst case wait technique requires larger data buffers 22 to be employed to store incoming data units during the prolonged period allocated for switch fabric drainage. Additionally, an additional time interval is interposed between the assertion of the SYNC_TIME_L signal and the actual switchover from the first switch fabric to the second switch fabric.

Ganmukhi likewise fails to teach or suggest the recited use of a restart timer, which implements a designated delay between the steps of controlling the first switch fabric to assume the standby mode and the second switch fabric to assume the active mode and sending data from the plurality of input devices into the second switch fabric. As discussed in the present specification at, for example, page 10, line 28 to page 11, line 1, a delay of this type advantageously avoids situations (e.g., timing skews) where an ingress line card could start sending data before the egress line card at the other end of the switch fabric path is ready to receive data traffic.

To the contrary, Ganmukhi teaches away by disclosing a technique wherein there is no delay, much less one implemented using a restart timer, between a switch fabric switchover and recommencing the forwarding of data units through the operative switch fabric. See, for example, page 7, lines 23-30.

Ganmukhi thus teaches a technique in which there is neither a predetermined drain delay nor a predetermined restart timer delay. Accordingly, there is no motivation to combine its teachings with the timers allegedly taught by Lindblom in the manner suggested, and as indicated above, the Lindblom PCT and SWT timers fail to meet the recited drain and restart timers. Indeed, even if it were possible to combine the teachings of Ganmukhi with those of Lindblom in the suggested manner, Ganmukhi contains specific teachings away which indicate that such a combination would not have been obvious. Accordingly, claim 18 is believed to be patentable over Ganmukhi and Lindblom.

Independent claims 25, 26 and 29 are believed allowable for reasons similar to those identified above with regard to claim 18.

The dependent claims are believed allowable for at least the reasons identified above with regard to their respective independent claims.

In view of the foregoing, claims 18-32 are believed to be in condition for allowance.

Respectfully submitted,



Date: June 19, 2007

Joseph B. Ryan
Attorney for Applicant(s)
Reg. No. 37,922
Ryan, Mason & Lewis, LLP
90 Forest Avenue
Locust Valley, NY 11560
(516) 759-7517